

WHAT IS CLAIMED IS:

1. A coating and developing apparatus comprising:

a carrier table on which at least one carrier containing a plurality of substrates is set;

a processor for applying a resist on each substrate taken out from the carrier set on the carrier table and developing the substrate after being subjected to exposing processing; and

an interface section for transferring the resist-coated substrate between the processor and an exposing apparatus for applying the exposing processing to the resist-coated substrate, the interface section including;

at least one temperature adjuster for adjusting a temperature of the substrate to an appropriate temperature for the exposing processing before the substrate is transferred to the exposing apparatus; and

a transfer mechanism for transferring the substrate among the processor, the temperature adjuster and the exposing apparatus.

2. The coating and developing apparatus according to claim 1, wherein the interface section further includes a peripheral exposing apparatus for exposing periphery of the substrate outside a circuit-forming area thereon, the transfer mechanism transfer the substrate among the processor, the temperature adjuster and the peripheral exposing apparatus.

3. The coating and developing apparatus according to claim 2, wherein the interface section includes a plurality of temperature adjusters stacked under the peripheral exposing apparatus.

4. The coating and developing apparatus according to claim 1, wherein the temperature adjuster adjusts a temperature of the substrate for which periphery of the substrate outside a circuit-forming area thereon has been exposed to the appropriate temperature for the exposing processing.

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5. The coating and developing apparatus according to claim 1, wherein the interface section further includes a clean-air filter unit, air passed thorough the clean-air filter unit being flown down into the interface section.

6. The coating and developing apparatus according to claim 5, wherein the interface section further includes an electrical unit housing electrical facility, the air passed thorough the clean-air filter unit being also flown down into a space for the electrical unit in the interface section.

7. A coating and developing apparatus comprising:

a carrier table on which at least one carrier containing a plurality of substrates is set;

a processor for applying a resist on each substrate taken out from the carrier set on the carrier table and developing the substrate after being subjected to exposing processing; and

an interface section for transferring the resist-coated substrate between the processor and an exposing apparatus for applying the exposing processing to the resist-coated substrate, the interface section including;

a shelf section having a plurality of processing units for containing or processing the substrate;

a first transfer mechanism for transferring the substrate between the processor and the exposing apparatus; and

a second transfer mechanism for receiving the substrate transferred from the processor by the first transfer mechanism and transferring the received substrate to any of the units of the shelf section.

8. The coating and developing apparatus according to claim 7, wherein the shelf section of the interface section includes at least one temperature adjuster for adjusting a temperature of the substrate to an appropriate temperature for the exposing processing before the substrate is transferred to the exposing apparatus, the substrate being transferred to the temperature adjuster by the first and/or the second transfer mechanisms.

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9. The coating and developing apparatus according to claim 7, wherein the interface section further includes a peripheral exposing apparatus, as one of the units, for exposing periphery of the substrate outside a circuit-forming area thereon, the substrate that has been transferred from the processor by the first transfer mechanism being transferred to the peripheral exposing apparatus by the second transfer mechanism.

10. The coating and developing apparatus according to claim 7, wherein the interface section further includes a loading unit, as one of the units, for loading the substrate between the first and the second transfer mechanisms, the substrate being transferred among the processor, the exposing apparatus and the loading unit by the first transfer mechanism and being transferred between the loading unit and any of the units of the shelf section by the second transfer mechanism.

11. The coating and developing apparatus according to claim 8, wherein the temperature adjuster adjusts the temperature of the substrate, of which the periphery outside the circuit-forming area thereon has been exposed, to the appropriate temperature for the exposing processing.

12. The coating and developing apparatus according to claim 7, wherein the processing units are stacked in the shelf section.

13. The coating and developing apparatus according to claim 7, wherein the first and the second transfer mechanisms are aligned on a almost straight line, as the first and the second transfer mechanisms face each other with the shelf section interposed therebetween, in a direction almost parallel to another direction in which the carrier is set on the carrier table.

14. The coating and developing apparatus according to claim 7, wherein the first transfer mechanism has an arm for transferring the substrate, that is movable upward, downward, forward and

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backward and rotatable about a vertical axis, and movable in a direction of a horizontal axis.

15. The coating and developing apparatus according to claim 7, wherein the second transfer mechanism has an arm for transferring the substrate, that is movable upward, downward, forward and backward and rotatable about a vertical axis.

16. The coating and developing apparatus according to claim 7, wherein the interface section further includes a clean-air filter unit, air passed thorough the clean-air filter unit being flown down into the interface section.

17. The coating and developing apparatus according to claim 16, wherein the interface section further includes an electrical unit housing electrical facility, the air passed thorough the clean-air filter unit being also flown down into a space for the electrical unit in the interface section.

18. A method of forming a pattern comprising the steps of:
applying a resist on a surface of a substrate;
adjusting a temperature of the resist-coated substrate to an appropriate temperature for exposing processing;
exposing the temperature-adjusted substrate; and
developing the exposed substrate to form a resist pattern on the substrate surface.

19. A method of forming a pattern comprising the steps of:
applying a resist on a surface of a substrate;
exposing periphery of the resist-coated substrate outside a circuit-forming area thereon;
adjusting a temperature of the peripheral-exposed substrate to an appropriate temperature for exposing processing;
exposing the temperature-adjusted substrate; and
developing the exposed substrate to form a resist pattern on the substrate surface.

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20. A method of forming a pattern comprising the steps of:
applying a resist on a surface of a substrate;
adjusting a temperature of the resist-coated substrate to an appropriate temperature for exposing processing;
exposing the temperature-adjusted substrate;
exposing periphery of the exposed substrate outside a circuit-forming area thereon; and
developing the peripheral-exposed substrate to form a resist pattern on the substrate surface.

21. A method of forming a resist pattern on a surface of a substrate, for a coating and developing apparatus having a processor for applying a resist on a substrate and developing the substrate after being subjected to exposing processing and an interface section for transferring the substrate between the processor and an exposing apparatus for applying the exposing processing to the substrate, the method comprising the steps of:

applying a resist on a surface of a substrate by the processor;

transferring the resist-coated substrate from the processor to the interface section by a first transfer mechanism and adjusting a temperature of the resist-coated substrate to an appropriate temperature for the exposing processing in the interface section before the resist-coated substrate is transferred to the exposing apparatus;

transferring the temperature-adjusted substrate from the interface section to the exposing apparatus by the first transfer mechanism and exposing the temperature-adjusted substrate by the exposing apparatus; and

transferring the exposed substrate from the exposing apparatus to the processor via the interface section by the first transfer mechanism and developing the exposed substrate by the processor to form a resist pattern on the substrate surface.

22. A method of forming a resist pattern on a surface of a substrate, for a coating and developing apparatus having a processor for applying a resist on a substrate and developing

substrate after being subjected to exposing processing and an interface section for transferring the substrate between the processor and an exposing apparatus for applying the exposing processing to the substrate, the method comprising the steps of:

applying a resist on a surface of a substrate by the processor;

transferring the resist-coated substrate from the processor to the interface section by a first transfer mechanism and exposing periphery of the resist-coated substrate outside a circuit-forming area thereon;

transferring the peripheral-exposed substrate by a second transfer mechanism and adjusting a temperature of the peripheral-exposed substrate to an appropriate temperature for the exposing processing in the interface section;

transferring the temperature-adjusted substrate from the interface section to the exposing apparatus by the first transfer mechanism and exposing the temperature-adjusted substrate by the exposing apparatus; and

transferring the exposed substrate from the exposing apparatus to the processor via the interface section by the first transfer mechanism and developing the exposed substrate by the processor to form a resist pattern on the substrate surface.

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